

### REMARKS

Applicants' undersigned attorney thanks the Examiner for the Examiner's comments. Applicants respectfully request reconsideration of this patent application, particularly in view of the above Amendment and the following remarks. Currently, Claims 1-23 are pending.

The present invention is directed to textile fibers made from polypropylene strengthened with an impact modifier. The impact modifier is a synthetic material having elastomeric properties.

### Amendment to the Claims

Claims 1-23 have been examined with no claims being allowed. Amended Claim 1 is included herein. No new matter has been added by this amendment.

Applicants have amended Claim 1 to include a recitation of various impact modifiers. Support for this amendment is provided at page 7, line 8 – page 8, line 2, of the specification.

No additional fee is due for this Amendment because the number of independent claims remains unchanged and the total number of claims also remains unchanged.

### Claim Rejections - 35 U.S.C. §102

The rejection of Claims 1-5, 7, 9-10, 12-13, 15, 17-18, and 20-22 under 35 U.S.C. §102(b) as being anticipated by Ogale et al. (U.S. Patent 5,346,756) is respectfully traversed, particularly in view of the above Amendment and the following remarks.

Ogale et al. disclose a nonwoven textile material made up of fibers including a blend of a propylene polymer material and an olefin polymer material, polymerized in the presence of a stereospecific Ziegler-Natta catalyst system having a solid catalyst component supported on a magnesium dihalide in active form. It is essential that the solid catalyst component comprises a titanium compound having at

least one halogen-titanium bond, and an electron donor compound supported on the magnesium dihalide in active form.

For a reference to anticipate a claim, the reference must disclose each and every element or limitation of the claim. Ogale et al. do not disclose each and every element or limitation of independent Claims 1, 12, and 20. Applicants' invention as claimed in independent Claims 1, 12, and 20 requires that a fiber include polypropylene blended with an impact modifier. More particularly, in Claim 1 the impact modifier is either ethylene-propylene-diene-monomer (EPDM), styrene/ethylene-co-butadiene/styrene (SEBS), styrene-poly(ethylene-propylene)-styrene-poly(ethylene-propylene) (SEPSEP), a multi-block elastomeric copolymer, polyurethane, polyamide, polyester, single-site or metallocene-catalyzed polyolefin having density less than about 0.89 grams/cc, or ethylene/styrene, while in Claims 12 and 20 the impact modifier is either EPDM, SEBS, or SEPSEP. Ethylene/styrene interpolymers are "pseudo-random" copolymers of ethylene and styrene, synthesized via Dow Chemical Co.'s INSITE® Technology.

Ogale et al. fail to disclose the combination of polypropylene blended with any impact modifier. In particular, Ogale et al. fail to disclose the combination of polypropylene blended with any of the impact modifiers recited in Claims 1, 12, and 20. As defined on page 7, lines 5-6, of the present application, the term "impact modifier" refers to "a synthetic material having elastomeric properties." This definition is consistent with the usage of the term "impact modifier" as used in common parlance by those skilled in the art, including manufacturers of impact modifiers. Ogale et al. fail to disclose a combination of polypropylene with a synthetic material having elastomeric properties. >

Furthermore, Ogale et al. fail to disclose any styrenic block copolymers as suitable olefin polymers. The molecular structure of such block copolymers as SEBS and SEPSEP, for example, includes block segments of styrene monomer units and rubber monomer units. Prior to processing, polystyrene end-blocks are associated in rigid domains. "Physical crosslinking" via these domains yields a continuous three-dimensional network. During processing, in the presence of heat and shear or solvent, the polystyrene domains soften and permit flow. After >

cooling or solvent evaporation, the polystyrene domains reform and harden, locking the rubber network in place. This "physical crosslinking" and the reinforcing effect of the styrene domains give these polymers their high tensile strength. The rubber mid-block gives them their elasticity. Ogale et al. fail to disclose any olefin polymers having the elastomeric properties of EPDM, SEBS, and/or SEPSEP.

In addition, the olefin polymers and the catalyst system required in Ogale et al. produce a material quite different from the fibers of the present invention. More particularly, many of the olefin polymers in Ogale et al. are covalently bonded copolymers, unlike the impact modifiers in the present invention. Also, Ogale et al. disclose lower ethylene content random copolymers, whereas the present invention includes high ethylene content copolymers. More particularly, EPDM and the rubber monomer units of the elastomeric block copolymers typically include at least 40% ethylene. In contrast, Ogale et al. disclose a random propylene terpolymer including from 1.5 to 5% ethylene (Col. 1, lines 43-46), or a propylene polymer composition including from 40 to 80% of a copolymer fraction that contains less than 40% ethylene (Col. 1, line 64 – Col. 2, line 12), such that the propylene polymer composition includes less than 16 to 32% ethylene. Consequently, the resulting material in Ogale et al. is quite different from the fibers of the present invention.

For at least the reasons presented above, Applicants respectfully submit that Claims 1, 12, and 20 are not anticipated by Ogale et al. Because Claims 2-5, 7, 9-10, 13, 15, 17-18, and 21-22 depend from Claims 1, 12, and 20, respectively, these claims are also not anticipated by Ogale et al. Thus, Applicants respectfully request withdrawal of this rejection.

#### **Claim Rejections - 35 U.S.C. §103**

The rejection of Claims 6, 8, 11, 14, 16, 19, and 23 under 35 U.S.C. §103(a) as being unpatentable over Ogale et al., as applied to Claims 1, 12, 20, and 22 above, is respectfully traversed.

As mentioned above, Ogale et al. disclose a nonwoven textile material made up of fibers including a blend of a propylene polymer material and an olefin

polymer material polymerized in the presence of a particular catalyst system, but fail to disclose the combination of polypropylene blended with an impact modifier.

The Examiner suggests that it would have been obvious to one of ordinary skill in the art to have employed Ogale et al.'s textile fibers to form staple fibers, knit fabrics, or absorbent articles. However, since Ogale et al. fail to disclose or suggest any type of fibers including the combination of polypropylene blended with an impact modifier, it would, therefore, not be obvious to a person of ordinary skill in the art to form staple fibers, knit fabrics, absorbent articles, or any other applications, using a combination of polypropylene blended with an impact modifier based on the teachings of Ogale et al.

For at least the reasons given above, Applicants respectfully submit that the teachings of Ogale et al. fail to disclose or suggest Applicants' claimed invention. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

#### Conclusion

Applicants intend to be fully responsive to the outstanding Office Action. If the Examiner detects any issue which the Examiner believes Applicants have not addressed in this response, Applicants' undersigned attorney requests a telephone interview with the Examiner.

Applicants sincerely believe that this Patent Application is now in condition for allowance and, thus, respectfully request early allowance.

Respectfully submitted,



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